

Parkland College

Physics Courses

Natural Sciences Courses

2015

Physics 121 General Physics I

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PARKLAND: Physics 121 (1pm) - SP2015

Instructor: Jeremy Jang jjang@parkland.edu

Office Hours: M-126: 3pm - 4pm, Mondays

Phone: (847) 708-0897 (emergency only)

Course Website: <http://cobra.parkland.edu>

Text: *Physics Fundamentals*, Colletta

Note: a calculator (scientific or graphing) will also be required

Course Aims: Introduce several core concepts of physics.

Provide a methodology which applies these concepts towards solving problems.

Grading:

Participation:	200	pts (10 pts each)
Labs:	150	pts (15 pts each)
Exams:	390	pts (130 pts each)
Final Exam:	260	pts (worth 2x a regular exam)
TOTAL:	1000	pts

Grade	need at least:
"A"	895 pts
"B"	795 pts
"C"	695 pts
"D"	595 pts

Homework: Homework problem sets will be posted on the course website. There is one set per lecture topic. Although it doesn't count for your grade, it will be useful to do...

Participation: One in-class problem will be presented after each lecture topic. They will be collected on the same day. They are available on the course website, so if you miss one, you can turn it in late (-2pts late penalty).

Labs: On-campus: Purchase a lab manual from the bookstore, and bring it on lab days. The manual has worksheets for each lab, which need to be turned in before you go. Be sure to complete the worksheet thoroughly for full credit! If you miss a lab, come see me about making it up (-2pts late penalty).
Online: See the course website for details. Late labs are penalized (-2pts).

Exams: Closed book, closed notes. Calculators allowed. Equation sheet will be provided. Time limit: 1 hr 50 min. Format: 13 random homework questions, with randomized numbers. Each question has 5 parts (again, chosen randomly). You MUST give an explanation or show work for your answers to receive any credit!
I will require at least one week prior notice if you wish to reschedule an exam. Otherwise, there is no guarantee (unless you have a legitimate emergency).

Final Exam: Cumulative, 2 hr time limit. Otherwise, same format as a regular exam.

Calendar:

A calendar with topics, labs (marked with *), and exams is provided below.

(Note: this assumes no unforeseen events like inclement weather, etc).

Week	Monday	Tuesday	Wednesday	Thursday	Online Lab Due
Jan 12	Intro -		Vectors -		
Jan 19			MotionVariables -	- *1D-Motion	
Jan 26	Kinematics-1D -	- *1D-Motion	Kinematics-2D -	- *2D-Motion	
Feb 02	Forces-Laws -	- *2D-Motion	Forces-Types -	- *Forces	*1D-Motion -
Feb 09	CircularMotion -	- *Forces	Energy-Laws -	- *Centripetal	*2D-Motion -
Feb 16	Review -	- *Centripetal	Exam!!! -		*Forces-2D -
Feb 23	Energy-PE -		Momentum -		*CircularMotion -
Mar 02	Rot. Variables -		Rot. Kinematics -	- *Work&Energy	*Energy -
Mar 09	Torque-Concept -	- *Work&Energy	Torque-Laws -	- *Momentum	*Momentum -
Mar 16	Review -	- *Momentum	Exam!!! -		*Rotation -
Mar 23					
Mar 30	Rot. Energy -		Ang. Momentum -	- *Torque	
Apr 06	HarmonicMotion -	- *Torque	Waves&Sound -	- *SHM	
Apr 13	Fluids -	- *SHM	Heat -	- *Resonance	*SHM -
Apr 20	Review -	- *Resonance	Exam!!! -		*Waves&Sound -
Apr 27	HeatTransfer -		IGL&Thermo -	- *Buoyancy	*Fluids -
May 04	Review -	- *Buoyancy	Review -		
May 11		Final Exam!!! May 12 @11am			

Makeups:

In-class problems: These must be turned in before the day of the Final Exam.

Late assignments will be penalized (-2pts) unless you have a valid excuse.

Assignments must be turned in to me personally; any assignments dropped off in my mailbox is NOT guaranteed to be graded.

Labs: Makeups for missed labs are only possible if you schedule one with me.

A makeup lab is automatically penalized (-2pts) unless you have a valid excuse.

Exams: Makeups are only possible if you schedule one with me, in person, at least one week before the actual exam date. Even then, there are no guarantees.

Bonus: I will replace your lowest regular exam score with your equivalent

Final Exam score if (and only if) it helps your grade. This is done automatically, and does not require any action on your part.

Attendance:

Although attendance itself is not part of your final grade, late penalties and missed assignments will have an effect. It is your responsibility to keep up, and keep track of your grade (on the course website).

Disabilities:

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance), please contact:

Cathy Robinson, Room X148, 217-353-2082, crobinson@parkland.edu